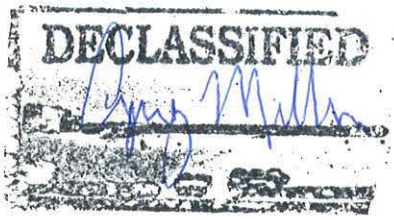

From: Hayter, Earl J ERDC-RDE-EL-MS
To: Miller, Garyg
Subject: RE: Dioxin Consultation for the St. Regis Site - CONFIDENTIAL, DO NOT CITE, QUOTE, OR DISTRIBUTE
Date: Wednesday, January 07, 2015 7:29:01 AM

Hi Gary,

I will resume sending you the weekly progress reports this Friday. I had a bunch of use-or-lose AL to burn over the last two weeks.

Earl

> -----Original Message-----
> From: Miller, Garyg [mailto:Miller.Garyg@epa.gov]
> Sent: Tuesday, January 06, 2015 5:14 PM
> To: Hayter, Earl J ERDC-RDE-EL-MS; Schroeder, Paul R ERDC-RDE-EL-MS
> Cc: Turner, Philip
> Subject: FW: Dioxin Consultation for the St. Regis Site - CONFIDENTIAL, DO
> NOT CITE, QUOTE, OR DISTRIBUTE
>
> FYI – EPA position on relative bioavailability (RBA) factors.
>
>
>
> Thanks,
>
>
>
> Gary Miller
>
> EPA Remedial Project Manager
>
> 214-665-8318
>
> miller.garyg@epa.gov
>
>
>
> From: Berg, Marlene
> Sent: Tuesday, January 06, 2015 1:42 PM
> To: Logan, Mary; Miller, Garyg
> Cc: Patterson, Leslie; Scozzafava, MichaelE
> Subject: Fw: Dioxin Consultation for the St. Regis Site - CONFIDENTIAL, DO
> NOT CITE, QUOTE, OR DISTRIBUTE
>
>
>
> Mary, I imagine that you have seen this, but I wanted to share this with a
> few folks, before I do so with my dioxin workgroup.
>
>
>
> And, Gary, this is the consultation that I had been talking about on the
> phone.
>
> Let me know if you have any questions and I'd be happy to answer them.
> Please email me initially as I am off-site and have a problem with my
> voicemails.

9563119

>
> Marlene
>
> _____
>
> From: Scozzafava, MichaelE
> Sent: Tuesday, January 6, 2015 11:29 AM
> To: Tanaka, Joan; Patterson, Leslie
> Cc: Berg, Marlene; Turner, David; Ammon, Doug; Stalcup, Dana; Cooper,
> DavidE; Burgess, Michele
> Subject: Dioxin Consultation for the St. Regis Site
>
>
>
> Joan and Leslie,
>
> We appreciate consulting with Region 5 on the development of proposed
> dioxin soil cleanup levels at the St. Regis site in Minnesota. Our review
> of the draft September 8, 2014, Feasibility Study (FS) Addendum finds the
> proposed site-specific PRGs are protective for residential and
> commercial/industrial use. We did, however, identify a number of concerns
> with the risk calculations that are discussed below.
>
> Our review of the FS addendum was conducted in light of new dioxin
> information available since the June 2011 proposed plan. New dioxin
> information includes, notably, the 2012 IRIS reference dose (RfD) for TCDD
> and new guidance on developing site-specific relative bioavailability
> (RBA) exposure factors for dioxin in soil.
>
> A non-cancer PRG, using the 2012 RfD published in IRIS along with an RBA
> of 1.0, per existing Superfund RBA guidance, equates to 69 ppt for
> residential use and 803 ppt for commercial/industrial use. These PRGs
> reflect an HI of 1 and are within the acceptable cancer risk range of
> 1.9E-05 for residential use and 3.8E-05 for commercial/industrial use (per
> EPA's HEAST cancer slope factor (CSF) for TCDD). See Attachment A for
> hazard indices and cancer risks associated with these calculated PRGs.
>
> Based on an evaluation of the St. Regis 2008 Human Health and Ecological
> Risk Assessment (HHERA), we cannot support the use of the site-specific
> RBA of 0.5, used to develop the proposed PRGs, because it does not conform
> to current EPA guidance. This RBA value was derived based on Ruby et
> al[1], in which a site-specific RBA study was conducted using soils from
> Michigan. Based on Superfund science policy[2] that is available today, we
> would have conducted the risk assessment using a default RBA of 1.0. As
> such, we recommend that future site-specific RBAs be developed using
> information found at the Superfund dioxin website
> (http://epa.gov/superfund/health/contaminants/dioxin/dioxinsoil.html) with
> support provided by OSRTI and the Technical Review Workgroup (TRW)
> Bioavailability Subcommittee. Existing guidance2 at this link recommends,
> in the absence of sufficient site-specific data, the use of a default RBA
> of 1.0 in risk assessments. Site-specific data must include, at a
> minimum, the evaluation of soil samples collected at the site. This same
> guidance applies to the development of site-specific PRGs for PAHs, where
> the St. Regis HHERA also applies a non-site-specific RBA value of less
> than one.
>
> While we cannot support the site-specific RBA of 0.5 in light of current
> policy and guidance, we do support the FS Addendum proposed PRGs of 63 ppt
> and 380 ppt. These PRGs are more stringent than our calculation of revised
> updated PRGs (of 69 ppt and 803 ppt), and reflect an HI of 0.49 for

> residential and an HI of 0.27 for commercial/industrial use, and a cancer
> risk of 1E-05 for residential and commercial/industrial use (based on the
> RfD and HEAST CSF, respectively). See Attachment A for hazard indices and
> cancer risks associated with the proposed PRGs. As such, the proposed FS
> Addendum PRGs of 63 ppt and 380 ppt are considered protective for cancer
> risks and non-cancer effects.
>
> We want to thank you for the opportunity to work together in reaching the
> conclusion that the proposed PRGs for residential and
> commercial/industrial use are protective. We especially appreciate Region
> 5's extensive involvement and responsiveness as we worked through this
> consultation. Please note that our statement completes the dioxin
> consultation for the St. Regis site. If you have any questions, please
> don't hesitate to contact me or Marlene Berg of my staff.
>
> Sincerely,
>
> Mike
>
>
>
> Michael Scozzafava, Chief
>
> Science Policy Branch
>
> OSRTI, OSWER
>
> p: 703-603-8833
>
> cell: 202-407-2555
>
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>
> [1]Ruby MV, Fehling KA, Paustenbach DJ, et al. 2002. Oral bioaccessibility
> of dioxins/furans at low concentrations (50-350 ppt toxicity equivalent)
> in soil. Environ Sci Technol 36(22):4905–4911.
>
> 2EPA. Final Report - Bioavailability of Dioxins and Dioxin-Like Compounds
> in Soil. U.S. Environmental Protection Agency, Office of Superfund
> Remediation and Technology Innovation. December 20, 2010. Available on-
> line
> at:http://epa.gov/superfund/health/contaminants/dioxin/pdfs/Final_dioxin_R
> BA_Report_12_20_10.pdf
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> of dioxins/furans at low concentrations (50-350 ppt toxicity equivalent)
> in soil. Environ Sci Technol 36(22):4905–4911.
>
> [2]EPA. Final Report - Bioavailability of Dioxins and Dioxin-Like
> Compounds in Soil. U.S. Environmental Protection Agency, Office of
> Superfund Remediation and Technology Innovation. December 20, 2010.
> Available on-line
> at:http://epa.gov/superfund/health/contaminants/dioxin/pdfs/Final_dioxin_R
> BA_Report_12_20_10.pdf
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